

## **In search of biomass or whatever you do, don't cross the bridge!!!**

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Cofiring of biomass with coal has been shown to be the lowest cost method for generating “green power” and, at the same time, reducing the emissions of fossil-based SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub>. In addition, cofiring can provide a service to customers by providing an end use for low value or negative value products such as sawdust and other fine wood wastes generated by sawmills, furniture mills and related industries. The potential exists for sawmill operators to supply large amounts of sawdust to utilities at a reasonable cost to the power plant.

The problem is: Where is the sawdust and how do we get it? Over the years, we have been involved in the procurement of sawdust for five cofiring projects, three in Pennsylvania and two in West Virginia. Locating sawdust is a scavenger hunt, not a science. The yellow pages of the phone book can be very helpful in a given area; but sawmills are not always listed in phone books under the name of the mill. Also, sawmills are not always listed by trade organizations or by federal, state and local governments.

The computer is a helpful tool. The various white page, yellow page and postal service webpages are very useful in finding a particular phone number or address. Also, it is now possible to get leads by using original lists from various sources and searching a given town using search engines based on Standard Industrial Codes. These sources are by no means accurate, but many sawmills have been found by this means. Finding mills does require some detective work.

Once contact has been made with a particular sawmill, you may be faced with culture shock. Many small mills are what you would call “Mom and Pop” operations. That is not to say that they are small. Many of these types of mills generate 100 tons of sawdust per week or more. However, the owner may be open at odd hours or he may decide to shut down the mill and go fishing or shut down the mill and go hunting, regardless of business opportunities that may be out there. Some mills use their sawdust in the winter time and only have it available from March through October. Also, in some cases, you are dealing with the owner's wife or daughter as the secretary when making the first contact. It is very important that you gain their trust right at the outset or you will not be able to make any headway at that mill. Once you tell them who you are and what you are calling for, you generally get an appreciative audience. It is important to try to get immediate details of the mill by verifying their address, phone numbers, contact person (usually the owner but sometimes the mill manager), and directions to the mill.

Some of the directions given on how to find them are interesting to say the least. The most intriguing warning that was given recently was: “Whatever you do, don't cross the bridge!” There are many colorful people involved in the sawmill business. They are very interesting to talk to. When you first speak with the owner or mill manager, you need to make sure that he understands that you are looking for steady sources of sawdust and that you are initially only looking for information and wanting to determine if there is a desire to provide sawdust for a given power plant. They are usually very open and will give you unofficial estimates of cost. In most cases, they don't have contracts to provide sawdust. They either sell to farmers outright, deliver sawdust to an industry that has facilities to receive it on a come-as-you-are basis, or deal with a trucker to take it off their hands.

If they have contracts, they generally are willing to change over to supplying a power plant project if a long term contract is developed but they are understandably reluctant to part with a known company unless that assurance is forthcoming. Some owners are not willing to change even without a contract because they feel obligated to certain farmers that rely on using their sawdust.

Many times the mill will sell all of their byproducts to a broker who will pick it up and resell it to others. If possible, brokerage is an important option for a utility desiring to burn sawdust. It eliminates the need for multiple contracts for relatively small amounts of sawdust and it makes it simpler for the plant to order sawdust as needed. The ultimate goal in many instances would be to locate a broker or encourage one of the sawmill owners or truckers to become a broker and supply sawdust to the plant.

The mills are constantly in a state of change. Some intend to expand operations, to add pallet making to their plans, or to make other changes that will increase their sawdust production. Some are thinking of getting into transportation of their lumber. They may be willing to buy walking floor vans for their products and for sawdust. The mill owners also know other mill owners as well as truckers and companies that come to them for sawdust. They are a valuable source of information and they are not usually reluctant to give out that information.

After the initial phone contact has been made, it is very important that a visit be scheduled to the mill where additional discussion can be made with the owner and samples of sawdust can be obtained. The meeting with people face-to-face cannot be overemphasized. It is also necessary to inspect the mill to get an idea of how well it is run. Also, while going on a “grand tour” of sawmills, you will invariably run across other mills since many of them tend to congregate in clusters.

Once you are ready to get the mills under contract, you may again run up against culture shock. The fuel buyers at coal burning power plants know coal inside and out. They also know the intricacies of the coal business but they are not usually familiar with wood or the wood industry. It is important for fuel buyers to understand that, while they do need to have reasonable constraints on the parameters involved such as Btu, moisture ranges and so forth, they should not expect to develop a 20 page legal document and mail it to the potential supplier and then seriously believe that the supplier will respond. The mill owners don’t all deal with handshakes; but they also don’t have a lot of patience with overly complicated contracts.

A good way to deal with this issue is to invite the potential suppliers of sawdust to the power plant, show them the equipment being constructed, explain to them the temporary nature of the initial testing and tell them about the hopes for a long term commitment to burn sawdust. Then carefully explain the requirements for a proper bid and the details involved in getting the bid to the Fuels Department; but keep it simple. One thing is absolutely true, the people running these sawmills are, for the most part, hardworking down-to-earth people with no axe to grind. When it is explained to them what is intended at a given power plant, they are generally interested in participating. Many have stated that “it’s about time that someone has found a way to do something useful with these residues”.

In conclusion, sawdust is available. Sawdust is plentiful. But sawdust doesn’t just fall off the trees into your lap. You need to go through sometimes methodical and sometimes chaotic routes to obtain sufficient sawdust for a plant at a reasonable cost. It can be done, but each resource study is different. Each region has its own character. Pay close attention to details and remember that you are dealing with people, not machines. Communication is personal and, most of the time, it requires face-to-face contact. Most people in the sawmill industry would like to be part of helping the environment and helping themselves at the same time. It just takes some understanding and patience. Keep in mind that biomass doesn’t grow on trees, you need to find it. And by all means remember, when going to visit a sawmill... “Whatever you do, don’t cross the bridge!!!”